

# Historic, archived document

Do not assume content reflects current  
scientific knowledge, policies, or practices.





62.57

1953

LIBRARY  
RECEIVED  
★ DEC 31 1952 ★  
U. S. Department of Agriculture

# HOW TO grow better TOMATOES



**Francis C. Stokes**  
VINCENTOWN, N. J.





# How To Grow **BETTER** **TOMATOES**

**A Manual For Those  
25,000 Specialists Who Take  
Genuine Pride In Their Tomatoes,  
But Who Are Never Quite Satisfied With Results.**

Five pages of know-how are supported by offerings of the real thing—ten proven varieties, most of which are already known by our customers who have used Stokes products over the years. These growers are no small group, for their combined tomato production is far in excess of ten million dollars per year.

The Francis C. Stokes Company has a record of 70 years association with the industry. The start was November 30, 1881, in Philadelphia. Stokes can thus very properly be grouped among the older seed firms of the United States. It is now one of the very few houses devoting its entire thought and energies to one crop—tomatoes.

The Francis C. Stokes Company operates two outdoor experimental grounds—New Jersey in

the summer and the Province of Santa Clara, Cuba, in winter,—a routine which has been largely responsible for the amazing progress in the development of Stokes F<sub>2</sub> Hybrids. The hybrid vigor of these tried and proven crosses is breaking new records with each season, and their influence in the tomato industry is widely acknowledged.

We direct special attention to our offering on Page 17 of F<sub>2</sub> Hybrid Tomato Plants. These constitute perhaps the greatest contribution made by the Stokes Company to tomato production in the United States. Recently a grower in Illinois told us of his Stokescross production of 30 tons per acre. No other grower in the area matched his production or equaled his quality of fruit. May we serve you, too?

*Francis C. Stokes*



## *The Stokescross Story For 1953.*

### **Hybrid Tomatoes Are Again In Star Performance**

The validity of Hybrid Vigor is an accepted fact. Francis C. Stokes Co., after ten years of research has applied this phenomenon to F<sub>2</sub> tomatoes with astonishing success. For the fourth consecutive year we are conducting a Winter Proving Ground in the Province of Santa Clara, Cuba. This program allows two outdoor generations per year which in part accounts for the lead we have attained in the F<sub>2</sub> Hybrid Tomato field.

This leaflet tells the story of our progress to date. We still hold to five Stokescross strains, our top choices to date out of hundreds of crosses. The carefully written descriptions on page 4 of this folder antedate our catalog. Please accept them as accurately covering our present stocks. The buyer must make his own choices, although in the final analysis, actual experience with your own conditions will be your ultimate guide. We shall be glad to help you in making these choices.

Stokescross F<sub>2</sub> Hybrids are the tomatoes of tomorrow. We are sure you will want to include them in your 1953 acreage.



## There Are Seven Advantages:

**1. Strong Germination and Fast Come-Up**—The New Jersey State Seed Laboratory on 80 germination tests completed in November 1952, averaged 93.8%. This insures a complete and very fast come-up.

**2. Sturdy, Fast Growing Plants**—Hybrid Vigor is clearly evident in the early growth of the plant.

**3. Readiness to Set**—Invariably the Stokes-cross Hybrids set more readily than the average standard varieties.

**4. Early Maturity of the Crop**—This averages ten days to two weeks earlier than Rutgers—important in quality and in fly egg control.

**5. Less Cracking of the Fruit**—This is universally accepted, and a top factor in controlling mold count.

**6. Better Ripening to the Stem**—Under normal conditions there is very little yellow-top in Stokes-cross Hybrids.

**7. Production per Acre Increase**—In some acreage over 50%. This statement is substantiated by crop records in many states.

## Here Are The National Results For 1952 . . .

On over 10,000 acres Stokes-cross Hybrids grossed over \$25,000,000. It is extra tonnage and early maturity that count. August tomatoes are definitely superior to September tomatoes. Study the descriptions on the following page, make your choices with great care, draw up your plans, and reserve the necessary seed stock. There is no national supply. When our supply is exhausted it cannot be replenished until the summer of 1953.





## What Do The Critics Say?

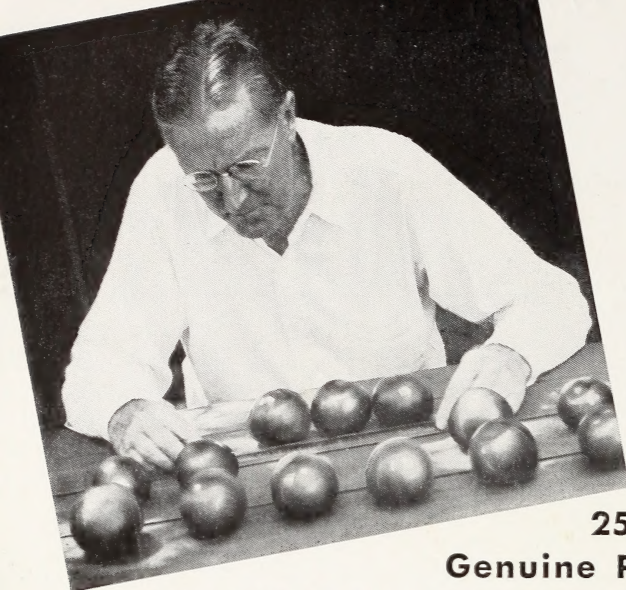
Many are enthusiastic. Some are critical. There is the usual professional jealousy, for these men have lost some of their professional prerogatives. We keep matching our work and our wits against some of the keenest men in the business. Here and there size has been criticized, but there were long dry periods in 1952. After all, who can expect full size when 60 fruits per plant are competing for fertilizer and moisture components required for thirty fruits per plant. A Purdue professor recently said that in the next ten years 90% of cannery tomatoes will be  $F_2$  Hybrids. It is results that count.

## Will Southern Grown Plants Be Available?

Yes, from the usual Southern sources. Over 25 plant growers will have our seed stocks, but advance reservations must be made. A list of plant growers who will produce Stokes-cross plants will be sent on request. In some cases you will prefer to send your own seed to your plant grower and have the protection of your own acreage. The seed cost is the same. The \$1.00 per 1000 plants premium on Stokes-cross Hybrids has been abolished. Ask for special seed quotations in quantities of 10 pounds or over.







# How To Grow **BETTER** **TOMATOES**

**A Manual For Those  
25,000 Specialists Who Take  
Genuine Pride In Their Tomatoes,  
But Who Are Never Quite Satisfied With Results.**

Five pages of know-how are supported by offerings of the real thing—ten proven varieties, most of which are already known by our customers who have used Stokes products over the years. These growers are no small group, for their combined tomato production is far in excess of ten million dollars per year.

The Francis C. Stokes Company has a record of 70 years association with the industry. The start was November 30, 1881, in Philadelphia. Stokes can thus very properly be grouped among the older seed firms of the United States. It is now one of the very few houses devoting its entire thought and energies to one crop—tomatoes.

The Francis C. Stokes Company operates two outdoor experimental grounds—New Jersey in

the summer and the Province of Santa Clara, Cuba, in winter,—a routine which has been largely responsible for the amazing progress in the development of Stokes F<sub>2</sub> Hybrids. The hybrid vigor of these tried and proven crosses is breaking new records with each season, and their influence in the tomato industry is widely acknowledged.

We direct special attention to our offering on Page 17 of F<sub>2</sub> Hybrid Tomato Plants. These constitute perhaps the greatest contribution made by the Stokes Company to tomato production in the United States. Recently a grower in Illinois told us of his Stokescross production of 30 tons per acre. No other grower in the area matched his production or equaled his quality of fruit. May we serve you, too?

*Francis C. Stokes*



# know your seed

You can buy tomato seed for far less money than the prices quoted on the seed stocks in this catalog. At \$5.00 per ounce, however, you are paying only 1% of the value of a good acre of tomatoes. Certainly it is worth 1% to be sure of the stock you buy. The first step toward better tomatoes is to purchase the very finest seed available regardless of cost. We recommend that you make a careful study of the ten varieties in this book. They have been developed with the utmost care. You will probably need two or three varieties to cover your full requirements. All Stokes tomato seed is treated with DuPont Ceresan M. This chemical inhibits the activities of harmful soil organisms and makes possible a stronger and earlier germination of the seed. This is especially noticeable in Stokes F<sub>2</sub> Hybrids.

# know your plants



What is true for tomato seed is, of course, likewise true for tomato plants. The Francis C. Stokes Company has made complete arrangements for pedigreed and certified tomato plants to be grown in the South from their seed. The full details of this offer will be found on the last page of this catalog. Cheaper plants will be available, they always are, but they may prove to be the most expensive in the end. Careful growing, careful packing, and delivery by our high speed trucks will be your answer.

Introducing the new Stokes 1 oz. seed package—a handy re-use plastic box. Orders for 1 lb. and over will be shipped in the tamper proof canister with which you are familiar.



# Improve your soil

We strongly urge that all tomato growers plan a long-time build-up of organic matter in their soil. This can be accomplished by constant plowing down of green manures. We recommend that tomato fields be thoroughly tested by a competent soils laboratory four months before planting, and that they be tested twice after planting at intervals of 30 to 60 days. This is especially important to determine whether there has been a loss of elements through leaching by heavy rains. Light sandy soils usually show a greater loss than clay or heavy loam soils.

In taking your soil samples ascertain if there is a hardpan at the plowsole or lower. It is quite possible that a chisel plow, or a sub-soiler will greatly benefit your whole soil structure. Keep in mind that the roots of a tomato plant will penetrate to a depth of 4 to 6 feet under optimal conditions.

## Feed STEADILY

Most tomato fields are under-fed, but your soils laboratory report will show you what the fertilizer formula should be, the quantity required, and how to apply it. Generally speaking, we recommend from 1500 to 3000 pounds per acre. Part of this should be applied before or at the time of setting, and part should be added with each cultivation. Be alert to deficiency signs. Generally there is more danger of under-feeding than over-feeding. Do not deliberately over-feed until the main fruit setting time is past.

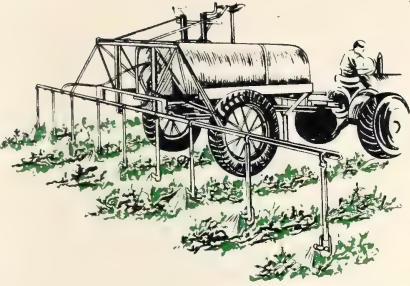
## Irrigate



A tomato is composed of more than 92% water. In prolonged drought, especially in cases where the root development is not at its full depth, a tomato can lose from one to two ounces in weight. We have records of Stokesdale producing 14.1 tons per acre on non-irrigated land, and adjacent to it, 19.5 tons per acre under irrigation, an increase of 5.4 tons. A rough measurement of water requirements indicates that one inch rainfall per week or its equivalent in irrigation is optimum. Many of our customers will, of course, tell us it is impossible to irrigate. The first cost may be high for irrigating equipment, but if the yield of a crop can be increased up to 30%, no one will question that it is a subject worthy of your best thought.



In most parts of the world tomatoes cannot be grown commercially without a complete and thorough spray program. Insects and diseases are here to stay. They present a never ending problem which we must confront with the best knowledge available. We recommend eight sprayings per year, applied at 7 to 10 day intervals using the spray schedule outlined at the foot of this page.



The ideal spray equipment is a 400 lb. pressure pump with a 40 ft. boom. When planting your field, space the rows of plants 5 ft. apart and omit every seventeenth row. This spacing permits complete spraying of the field with minimum damage to the plants.

Feeding of the plant by spraying soluble nutrients on the foliage is a newer subject, but it is one that we recommend. Very often in order to regain foliage, after it is too late to apply fertilizer, a spray of DuPont's Nugreen (nitrogen thru urea) or McCormick's Hy-gro, or Miller's 16-16-16 will revive a sick field.

## SPRAY SCHEDULE

Application Number	Spray	FORMULA
		APPLY 150 GALLONS PER ACRE
1	Zerlate	100 gals. water, 2 lbs. Zerlate
2	Zerlate	100 gals. water, 2 lbs. Zerlate
3	Copper or Dithane	100 gals. water, 4 lbs. fixed copper 100 gals. water, 2 qts. Dithane and 1 lb. zinc sulphate
4	Zerlate	100 gals. water, 2 lbs. Zerlate
5	Copper or Dithane	100 gals. water, 4 lbs. fixed copper 100 gals. water, 2 qts. Dithane and 1 lb. zinc sulphate
6	Copper or Dithane	100 gals. water, 4 lbs. fixed copper 100 gals. water, 2 qts. Dithane and 1 lb. zinc sulphate
7	Copper or Dithane	100 gals. water, 4 lbs. fixed copper 100 gals. water, 2 qts. Dithane and 1 lb. zinc sulphate
8	Copper or Dithane	100 gals. water, 4 lbs. fixed copper 100 gals. water, 2 qts. Dithane and 1 lb. zinc sulphate
INSECT CONTROL — add 4 lbs. calcium arsenate to any of the above.		
BLOSSOM THRIP CONTROL — add wettable DDT powder to any of the above. Follow the manufacturers recommendations.		

# Fruit Set

Temperature is the primary factor in the setting of tomato blossoms. The tomato grows fastest at night when sugar, formed in the leaves during the day, passes to the growing stem-tip, fruit, and to the root. The best temperature for this sugar movement is 65°. Sugar transport to both fruit and root slows down on hot nights. Root weight decreases steadily as night temperatures increase.

Length of day and intensity of light do not greatly influence the growth of tomatoes, provided temperature and nutrition are properly controlled. Earliana, Valiant and the Stokes-cross Hybrids adapt themselves to a wide range of night temperatures. Rutgers is much more rigid in its requirements, unsuitable temperatures often causing failure to set the first two hands.

Other factors responsible for the failure of blossoms to produce fruit are; blossom thrip, prolonged rainfall, lack of sunshine, high winds and over-vegetative vine growth at blossom time. Inspect your tomatoes for blossom thrip daily, between 10:00 a.m. and noon. For control see page 3.

## Fruit Size



Fruit size depends on heredity, spacing, nutrition, moisture, temperature and the number of fruit per plant. Heredity is controlled by the tomato breeder. You can further his efforts by selecting the seed best suited to your soil and climate. Spacing and nutrition are closely related. A crowded plant is an undernourished plant—an undernourished plant will not produce full size fruit. Allow a minimum of 15 square feet per plant. An adequate and regular supply of moisture is essential. See irrigation suggestions on Page 2.

High temperatures, day or night, will result in small tomatoes. Remember that an official day reading of 90° means field soil temperature can be 115°.

40 fruit per plant is considered an ideal load in field production. At a six ounce average this makes 15 pounds of tomatoes per plant or 20 tons per acre. To secure a 6 ounce average, aim for 7½ ounce tomatoes on the first two hands.



# *If you grow* **FOR MARKET**

**NEVER DECEIVE YOUR BUYER.** The integrity of your pack is a priceless asset. Build prestige and never let it go. Once it is lost it takes years to regain it. You are the manager. It is your responsibility to maintain your standards with never any compromise on the quality, never any topping. Your package is a reflection of your strength.

**IDENTIFY YOUR PACKAGE.** If you are proud enough of your tomatoes put your name and brand on the package, then set a standard and stick to it. If it is US No. 1, say so. If it is US No. 2, admit it but make it a good US No. 2.

**OTHERS HAVE SET HIGH STANDARDS.** The Boston Market Gardeners Association grades their tomatoes. With them a tomato is unacceptable if it has a stem crack in excess of  $\frac{1}{2}$  inch. With them freshness and flavor count, uniform size is essential. If Boston can do it you can too.

**CHOOSE THE RIGHT SEED.** Use the descriptions in this manual as your guide. Some tomatoes are bred for market, some for the cannery. Some are bred for early maturity, some for size. Generally speaking we recommend F<sub>2</sub> Hybrids for at least 75% of your market acreage.

# *If you grow* **FOR THE CANNERY**

**PLAN AHEAD FOR YOUR PLANT SUPPLY.** Know your sources. Know your variety and know a good plant when you see one. Don't overlook the amazing production records that are being made by hybrids.

**USE A STARTER SOLUTION.** It will make a difference of 3 tons per acre. There are several good starter solutions available such as Hy-Gro, Take Hold, Soil 13-26-13 Rich or VHPF 5-25-15.

**SUPERVISE YOUR PICKING.** Give your pickers a goal for which to work. Consider paying them by the hour or offer a bonus of 2c a basket to maintain a grade of 80% US No. 1's or better. When your grade is only 80% arrange for the canner to advise you. Always handle your baskets promptly. Flat wagons with rubber tires, hitched in tandem and delivered by tractor, save an extra handling.

**STAND UP TO YOUR CONTRACT.** Only by doing so can you maintain the integrity of the contract system. Once that is lost experience shows that the quality of an entire area falls to a lower level. We strongly recommend that cannery growers contract with a well managed, well financed company which appreciates quality and will pay for it. Only quality tomatoes can be made into quality products. Only by following the rules of good management can you help yourself and your contract canner. In the competitive times ahead be sure you have a place for your tomatoes at an agreed upon price.

# STOKES

# *Varieties*

	Days to maturity	Harvest Season	Average Fruit Size in oz.	Depth to width ratio	Foliage	Spacing in feet	Fertilization	Strong Points
--	------------------	----------------	---------------------------	----------------------	---------	-----------------	---------------	---------------

## STOKESCROSS F<sub>2</sub> HYBRIDS

No. 1	65	Extra Early	4½	80%	Light	2 x 4	1500 lbs. 5-10-10 plus one sidedressing	Extreme earliness. Freedom from cracking. Best for Northern States.
No. 2	70	Medium Early	5½	80%	Medium Light	2 x 5	1500 lbs. 5-10-10 plus one sidedressing	High color and flavor. Maintains size.
No. 3	70	Medium Early	4½	90%	Medium Light	3 x 5	1500 lbs. 5-10-10 plus two sidedressings	Long season. Profusion of well formed fruit.
No. 4	75	Early Main	6	90%	Medium	3 x 5	1000 lbs. 0-20-20 plus three sidedressings 5-10-10	Heavy yield. Good shipper. Fine color and flavor.
No. 5	82	Early Main	6	85%	Heavy	3 x 6	1000 lbs. 0-20-20 plus three sidedressings 5-10-10	Vigorous. Heavy foliage. Heavy cropping.

## FOUNDATION STOCKS

Valiant	68	Extra Early	6	88%	Light	2 x 5	1200 lbs. 5-10-10 plus three sidedressings	Earliness, large size, meaty structure.
Stokesdale	75	Medium Early	5	90%	Medium Light	3 x 5	1200 lbs. 5-10-10 plus two sidedressings	Globe shaped. Firm, heavy bearer.
Master Marglobe	80	Main	6	90%	Heavy	3 x 6	1500 lbs. 5-10-10 plus one sidedressing	Solid flesh. Disease resistant.
Queens	70	Medium Early	6	85%	Medium Light	3 x 5	1200 lbs. 5-10-10 plus two sidedressings	Early, large fruit for market.
Rutgers	85	Main	6½	86%	Heavy	3 x 6	1000 lbs. 0-20-20 plus one sidedressing 5-10-10	Large size, vigorous, heavy yield.



# Stokescross<sup>®</sup> NO. 1

**This F<sub>2</sub> Hybrid Is Highly Recommended For The Northern States From Maine to Washington. Fruit Averages 4 to 5 Ounces.**

***65 Days to Maturity after Transplanting***

It is not a general purpose tomato but it should succeed wherever our older standard variety Stokesdale succeeded. The plant, however, is more robust and will furnish better coverage than Stokesdale. It is recommended for use by tomato growers who can profit by a prodigious production of early-ripening, brilliant fruit. It is essentially a market garden tomato, but one that will find an important place with the processors in New York, Michigan, Wisconsin, Minnesota, and the State of Washington.



**PRICE,  
POSTAGE PAID:**

Packet . . . 25c

Trade Packet . . . \$1.00

Ounce . . . \$5.00

# Stokescross<sup>®</sup> NO. 2

**An Improved F<sub>2</sub> Hybrid Introduced This Year For The First Time. An Early and Continuous Bearer of Full-Size (5½ oz.), Full-Flavored Fruit Suitable For Market or For Processing.**

**70 Days to Maturity after Transplanting**



This new F<sub>2</sub> cross is the product of our winter proving ground in the Province of Santa Clara, Cuba. It is a tomato with great possibilities. It combines earliness, size, and productiveness. Stokescross No. 2 is deep red in color, free from interior core, and its rich flavor recommends it to all market gardeners.

In our 1951 contract season, its production record showed a Government Grade of 74-25-1. We consider that its processing qualities are excellent either for peeling or for tomato products.

## **PRICE, POSTAGE PAID:**

Packet . . . . 25c

Trade Packet . . . . \$1.00

Ounce . . . . \$5.00



Order Sheet for Stokes Tomato Seed and Plants

# FRANCIS C. STOKES COMPANY

Vincentown, New Jersey

Breeders and Growers of Fine Tomato Seed since 1881

TEAR HERE

Name .....

R. D. or Street .....

Post Office .....

State .....



No. Pkgs.	Pkg. Size	STOKESCROSS* F <sub>2</sub> HYBRID SEED	Garden Packet	Trade Pkt. 1/8 oz.	One Ounce	\$	Cents
		Stokescross No. 1	25c	\$1.00	\$5.00		
		Stokescross No. 2	25c	1.00	5.00		
		Stokescross No. 3	25c	1.00	5.00		
		Stokescross No. 4	25c	1.00	5.00		
		Stokescross No. 5	25c	1.00	5.00		

## STOKES FOUNDATION STOCK

As Developed and/or Maintained  
on Stokes Proving Ground

		Valiant	25c	\$1.00	\$5.00		
		Stokesdale	25c	1.00	5.00		
		Master Marglobe	25c	1.00	5.00		
		Queens	25c	1.00	5.00		
		Rutgers	25c	1.00	5.00		

## STANDARD STOCK

			Garden Packet	Trade Packet	One Ounce	1/4 lb.	lb.		
		Valiant	15c	45c	80c	\$2.20	\$6.00		
		Stokesdale	15c	45c	80c	2.20	6.00		
		Marglobe	15c	40c	75c	2.00	5.00		
		Rutgers	15c	40c	70c	1.90	4.50		

No. Plants	STOKESCROSS* F <sub>2</sub> HYBRID TOMATO PLANTS	From Southern Growers
	Stokescross No. 4 . . . \$6.00 per 1,000	} Minimum Order 1,000 Plants
	Stokescross No. 5 . . . \$6.00 per 1,000	
		TOTAL

TEAR HERE

Seed . . Delivery  
Charges Prepaid

Plants . . F.O.B. Central Delivery  
points in 10 states. See Stokes  
Manual, page 17 for details. De-  
liveries to other states can be ar-  
ranged on large orders.

☐ Payment Enclosed  
☐ Ship C.O.D.

\*Trademark Reg.

# *Be a Good Manager...*

## **FOLLOW THE RULES!**

The Stokes Company has grown and bred tomatoes for 70 years. In this booklet we pass along to you, our friends, a digest of our experience. Even if you start with the Stokes seed best suited to your growing conditions and follow every suggestion in this book we cannot guarantee you production of 15, 25, or 30 tons per acre. However, we can promise you a greater yield of more grade A fruit than your fields have ever produced.

We *can* all grow better tomatoes—we must grow better tomatoes if we expect to hold our place in the first division. The production of tomatoes for market and for processing approaches \$200 million per year. There is no reason for thinking that the tomato, which is the most important American vegetable, will lose its place providing you as a manager follow the rules. Many of you are now finding that it is far more profitable to produce tomatoes on 25 acres the correct way, than 100 acres the wrong way.

Under our present economy, ordinary tomatoes won't pay out. Why grow 200 field boxes per acre at 2c per pound, when you can grow 400 field boxes per acre at 4c per pound? How well you understand and apply the fundamentals of tomato growing will largely determine the degree of your success.

---



Order Sheet for Stokes Tomato Seed and Plants

# FRANCIS C. STOKES COMPANY

Vincentown, New Jersey

Breeders and Growers of Fine Tomato Seed since 1881

TEAR HERE

Name .....

R. D. or Street .....

Post Office .....

State .....



No. Pkgs.	Pkg. Size	STOKESCROSS* F <sub>2</sub> HYBRID SEED	Garden Packet	Trade Pkt. 1/8 oz.	One Ounce	\$	Cents
		Stokescross No. 1	25c	\$1.00	\$5.00		
		Stokescross No. 2	25c	1.00	5.00		
		Stokescross No. 3	25c	1.00	5.00		
		Stokescross No. 4	25c	1.00	5.00		
		Stokescross No. 5	25c	1.00	5.00		

## STOKES FOUNDATION STOCK

As Developed and/or Maintained on Stokes Proving Ground

		Valiant	25c	\$1.00	\$5.00		
		Stokesdale	25c	1.00	5.00		
		Master Marglobe	25c	1.00	5.00		
		Queens	25c	1.00	5.00		
		Rutgers	25c	1.00	5.00		

## STANDARD STOCK

Garden Packet

Trade Packet

One Ounce

1/4 lb.

Lb.

		Valiant	15c	45c	80c	\$2.20	\$6.00		
		Stokesdale	15c	45c	80c	2.20	6.00		
		Marglobe	15c	40c	75c	2.00	5.00		
		Rutgers	15c	40c	70c	1.90	4.50		

No. Plants	STOKESCROSS* F <sub>2</sub> HYBRID TOMATO PLANTS	From Southern Growers
	Stokescross No. 4 . . . \$6.00 per 1,000	Minimum Order
	Stokescross No. 5 . . . \$6.00 per 1,000	1,000 Plants
		TOTAL

Seed . . Delivery Charges Prepaid

Plants . . F.O.B. Central Delivery points in 10 states. See Stokes Manual, page 17 for details. Deliveries to other states can be arranged on large orders.

☐ Payment Enclosed  
☐ Ship C.O.D.

\*Trademark Reg.

TEAR HERE

# *Be a Good Manager...*

## **FOLLOW THE RULES!**

The Stokes Company has grown and bred tomatoes for 70 years. In this booklet we pass along to you, our friends, a digest of our experience. Even if you start with the Stokes seed best suited to your growing conditions and follow every suggestion in this book we cannot guarantee you production of 15, 25, or 30 tons per acre. However, we can promise you a greater yield of more grade A fruit than your fields have ever produced.

We *can* all grow better tomatoes—we must grow better tomatoes if we expect to hold our place in the first division. The production of tomatoes for market and for processing approaches \$200 million per year. There is no reason for thinking that the tomato, which is the most important American vegetable, will lose its place providing you as a manager follow the rules. Many of you are now finding that it is far more profitable to produce tomatoes on 25 acres the correct way, than 100 acres the wrong way.

Under our present economy, ordinary tomatoes won't pay out. Why grow 200 field boxes per acre at 2c per pound, when you can grow 400 field boxes per acre at 4c per pound? How well you understand and apply the fundamentals of tomato growing will largely determine the degree of your success.

---

---



# Stokescross<sup>®</sup> NO. 3

**A Salad Tomato Developed For the Cellophane Box Trade. An Enormous Producer of Perfect 4½ Ounce Fruit With a Four Month Bearing Season.**

**70 Days to Maturity after Transplanting**



Where size is not the first consideration, Stokescross No. 3 is a tomato of importance. Under normal conditions, it will average 4½ ounces. This is the size which is required by the important cellophane trade. It is estimated 85% of the off-season tomatoes of the United States are now sold through this channel.

Stokescross No. 3 is early maturing, and if normally fed and sprayed will hold through a four months bearing season, with 40 to 80 fruits per plant. This cross will give its best performance on the heavier soils with normal moisture. It is one of the sweetest flavored tomatoes in our list.

## **PRICE, POSTAGE PAID:**

**Packet . . . . 25c**

**Trade Packet . . . . \$1.00**

**Ounce . . . . \$5.00**

# *Stokescross*<sup>®</sup> NO. 4

**One Of The Greatest Tomatoes Ever Introduced. Its Hybrid Vigor Enables The Plant to Develop a Heavy Crop Of 6 to 7 Ounce Fruit. A Tomato Which Will Bring Substantial Profit To The Grower.**

## ***75 Days to Maturity after Transplanting***

This brilliant F<sub>2</sub> Hybrid is already looked upon as a variety of enormous importance by the grower and shipper group, and by those who grow for canneries. Its surprising vigor is at once seen in its ability to produce large, solid, highly flavored fruit in enormous quantities. Highly acceptable to the "Green Wrap" trade. It will mature fully 10 days in advance of Rutgers and will surpass Rutgers in production by a wide margin.

Our own 1951 production figures averaged 15.4 tons per acre as compared with our Rutgers production of 11.4 tons per acre. In dollar return it brought \$518 per acre,—a high figure in any growing area. It is almost crack-free, a factor probably due to its deeper root system. Stokescross No. 4 will develop full color right to the stem. Its interior structure will allow long distance shipping. It is noted for its delicate sweet flavor.



Packet . . . . 25c

Trade Packet . . . . \$1.00

Ounce . . . . \$5.00

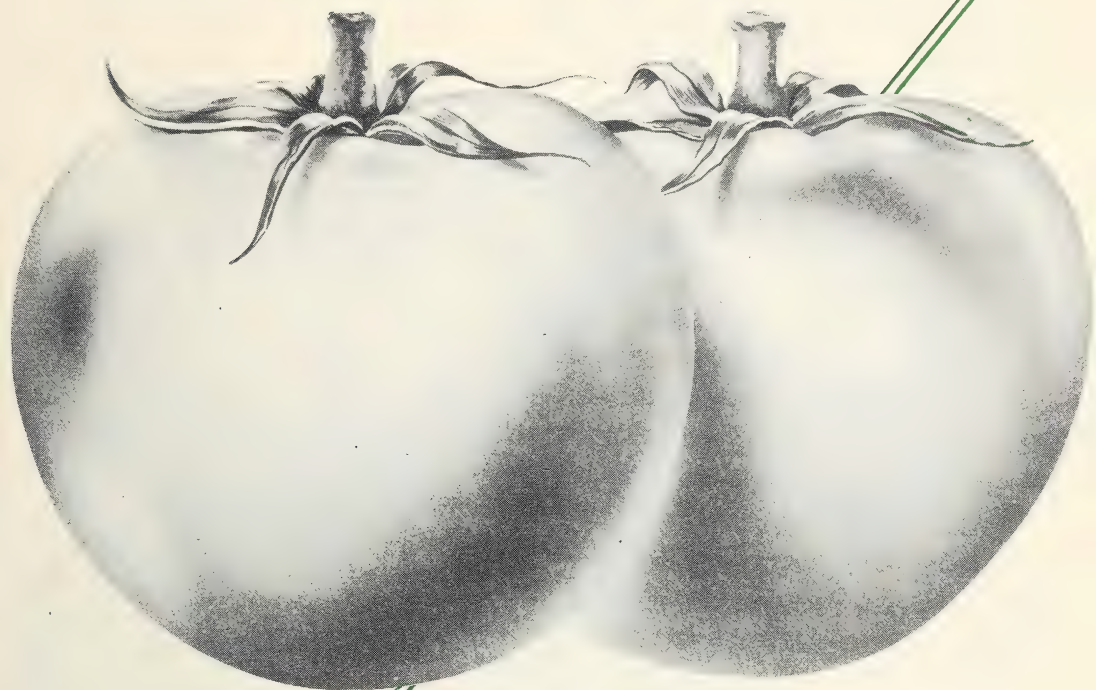
**PRICE, POSTAGE PAID:**



# *Stokescross*<sup>®</sup> NO. 5

**This Wonderful Tomato Has Many Points Of Similarity With Stokescross No. 4, But Stokescross No. 5's Heavier Foliage Is An Added Advantage Under Burning Sun.**

**82 Days to Maturity after Transplanting**



Yields exceeding 30 tons per acre have been recorded because of its long harvest season. Its hybrid vigor develops a strong full vine which sets heavily and which develops highly flavored and highly colored fruit. This F<sub>2</sub> hybrid has the same qualities of crack resistance as Stokescross No. 4. No tomato is completely crack free following a heavy rain.

The interior of Stokescross No. 5 is very solid, making it satisfactory both as a long distance shipper and as a canner. It is well known for its ability to stand up in the can better than the standard sorts.

## **PRICE, POSTAGE PAID:**

Packet . . . . 25c

Trade Packet . . . . \$1.00

Ounce . . . . \$5.00

# *Valiant* 68 Days to Maturity after Transplanting

**The Most Important Tomato For The Extra Early Market.  
It Is Large, Solid, Smooth And A Heavy Producer.**



Valiant, a Stokes introduction of 1936, is an out-cross that has contributed much to the tomato industry of the United States and Canada. It is a half-brother of Stokesdale. As a money maker for the extra-early market trade we know of none better. Valiant develops a Marglobe type fruit within 3 days of the older Earliana (Johnson and Stokes 1901). It has an open vine, which does not always protect the fruit from the sun, but in its special field, the very early market, it is highly prized. Valiant will be most successful on sandy loam. Generous applications of fertilizer are recommended. You buy the originator's stock when you buy Valiant from Stokes.

Stokes Proving Ground Valiant has been consistently the most profitable tomato for the extra-early growers. It is by no means unusual for growers to gross \$3.00 to \$4.00 per climax basket during most of the season.

	PACKET	TRADE PACKET	OUNCE	¼ lb.	1 lb.
Certified Proving Ground Stock	.25	\$1.00	\$5.00		
Certified Field Grown Stock	.15	.45	.80	\$2.20	\$6.00

**PRICES, POSTAGE PAID:**

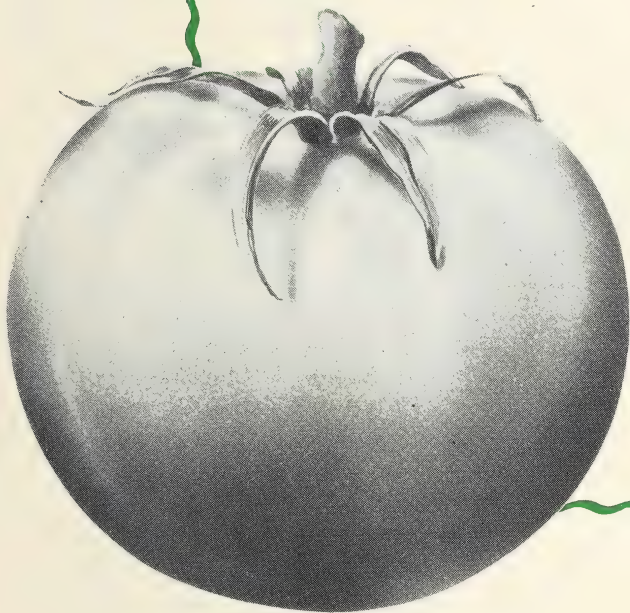


# Stokesdale

**75 Days to Maturity  
after Transplanting**

**There Is An Important Place For Stokesdale In The Northern States Where Earliness, Profuse Bearing and Perfection Of Fruit Are In Demand.**

Stokesdale, a Stokes introduction of 1936, comes from the same out-cross source as Valiant. The two have brought wealth and satisfaction to tomato growers in many states. Stokesdale, as developed and maintained by the originator, will produce a 5 ounce fruit, 7 days later than Valiant. Fruits are smooth, deep, round, solid, and bright scarlet in color. The vine growth is usually sufficient to prevent sunburn. Stokesdale has largely replaced Bonny Best (Stokes 1907) because of its profuse bearing, its early maturing, and its larger size.



## **PRICES, POSTAGE PAID:**

	PACKET	TRADE PACKET	OUNCE	$\frac{1}{4}$ lb.	1 lb.
Certified Proving Ground Stock	.25	\$1.00	\$5.00		
Certified Field Grown Stock	.15	.45	.80	\$2.20	\$6.00

# Master Marglobe

**This Master Strain, After 26 Years, Still Maintains Its Original Characteristics. It Has Earned Millions of Dollars For The Tomato Industry.**

**80 Days to Maturity  
after Transplanting**



A U.S.D.A. introduction of 1926. It is a cross between Marvielle de Marche (Vilmorin) x Globe (Livingston) made and perfected by the late Dr. Fred E. Pritchard. Its high resistance to fusarium wilt and nail head rust virtually eliminated those diseases.

Stokes' Master Marglobe is a 5½ ounce shipping tomato, perfectly formed with smooth shoulders and a very solid interior. Its high production is attested by the fact that many of our customers regularly raise 50 to 55 tons per acre under glass. Since its introduction Stokes has taken a leading part in maintaining the strength and trueness to type of this variety. Our proving ground stock Master Marglobe is generally regarded as being on the top level for the entire industry.

## **PRICES, POSTAGE PAID:**

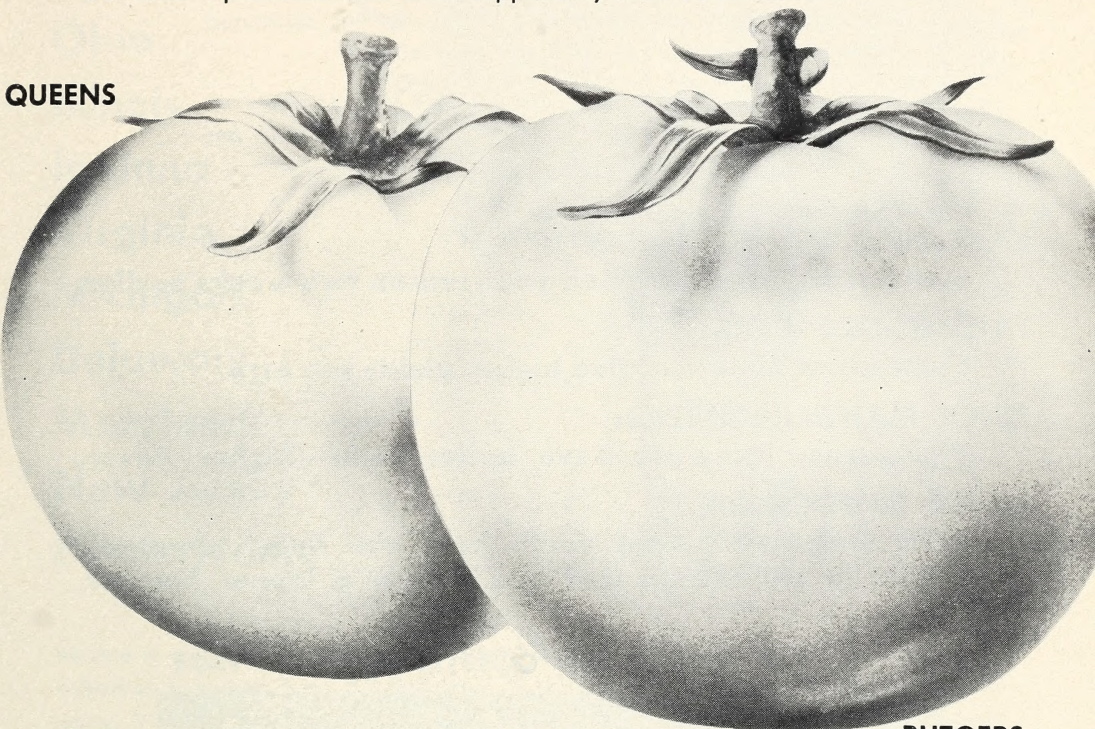
	PACKET	TRADE PACKET	OUNCE	¼ lb.	1 lb.
Certified Proving Ground Stock	.25	\$1.00	\$5.00		
Certified Field Grown Stock	.15	.40	.75	\$2.00	\$5.00



# Queens **70 Days to Maturity after Transplanting**

A large early market tomato introduced in 1951 by Professor Lyman G. Schermerhorn of Rutgers University. Queens produces large clusters of 6 ounce fruit. Foliage is light, blossoms set profusely and size is maintained well into the season. Before its introduction Queens was subjected to 10 years testing and wide-spread trials. Our seed is produced from stock supplied by Prof. Schermerhorn.

**QUEENS**



**RUTGERS**

# Rutgers **85 Days to Maturity after Transplanting**

A large general purpose tomato with fine flavor and color. Fruits are slightly flattened, globe shaped with thick fleshy walls. A vigorous productive plant, highly wilt resistant. To attain a full yield, limit nitrogen feeding until after the main blossom set. Rutgers is a favorite market and cannery tomato east of the Rockies.

## PRICES, POSTAGE PAID:

	PACKET	TRADE PACKET	OUNCE	¼ lb.	1 lb.
Queens Certified Proving Ground Stock	.25	\$1.00	\$5.00		
Rutgers Certified Proving Ground Stock	.25	\$1.00	\$5.00		
Rutgers Certified Field Grown Stock	.15	.40	.70	\$1.90	\$4.50



# *The 1951 plant story*

40 million hybrid plants were bought by growers from Virginia to Indiana. These men reported their Stokescross Hybrids out-grew and out-produced the standard varieties by a wide margin, in some instances doubling the yield. Stokescross plants started bearing 10 days earlier, continued longer and the quality of fruit was unexcelled.

Our own contract growers averaged 15¼ tons per acre on 97 acres in Burlington County. These men grossed \$518 per acre. All were from Stokes Southern grown plants.

## **CANNERS:**

**Stokescross tomatoes open your season two weeks earlier.**

## **FARMER-GROWERS:**

**Stokescross tomatoes give higher yields per acre.**

## **JUICE MANUFACTURERS:**

**Stokescross tomatoes have better color—higher flavor.**

## **HOME GARDENERS:**

**With Stokescross seed you'll have the finest tomatoes, earlier in the season and you'll have a longer harvest.**

## **TABLE OF CONTENTS**

## **PAGE**

Cannery Tomatoes .....	5
Feeding .....	2
Fruit Set .....	4
Fruit Size .....	4
Irrigating .....	2
Know Your Plants .....	1
Know Your Seed .....	1
Market Tomatoes .....	5
Plants .....	17
Seed—Hybrid	
Stokescross No. 1 .....	7
Stokescross No. 2 .....	8
Stokescross No. 3 .....	9
Stokescross No. 4 .....	10
Stokescross No. 5 .....	11
Seed—Standard Varieties	
Master Marglobe .....	14
Queens .....	15
Rutgers .....	15
Stokesdale .....	13
Valiant .....	12
Soil .....	2
Spraying .....	3
Variety Chart .....	6



# F<sub>2</sub> Hybrid Plants

*available to  
growers in*

**Ohio**

**Illinois**

**Indiana**

**Virginia**

**Michigan**

**Delaware**

**Maryland**

**New Jersey**

**Pennsylvania**



Southern grown Stokescross No. 4 and No. 5 plants will be distributed by our salesmen between April 10 and May 30. Order now from Francis C. Stokes Company, Vincenttown, N. J., your plant broker, canner, seedsman or plant grower.

Price:—\$6.00 per 1000 plants on advance orders, delivered to central points in each state listed.

Your delivery point will be noted on our acknowledgement of your order.

## *Stokes* **Tomato Plants are:**

**PRODUCED FROM GENUINE STOKESCROSS F<sub>2</sub> SEED.**

**GROWN UNDER STOKES SUPERVISION.**

**CAREFULLY PACKED AND HANDLED.**

**SHIPPED BY FAST TRUCK SERVICE.**

**DELIVERED ON SPECIFIED DATES . . .**

**. . . AT TRANSPLANTING TIME IN EACH AREA.**



# **HYBRID VIGOR**

**gives you:**

**Longer Harvest**

**Earlier Ripening**

**Heavier Production**

**Better Color & Flavor**

**More Solid Uniform Fruit**

**Less Cracked Fruit**

This booklet is the result of 70 years spent in tomato culture. Between its covers you will find described Five Stokescross  $F_2$  Hybrid tomatoes. Characteristics of these hybrids vary, some being bred for earliness, others for size of fruit, etc. Select the seed or plants with characteristics best suited to meet your marketing requirements and assure your own success with tomatoes.

Copyright by Francis C. Stokes Co. 1952

**FRANCIS C. STOKES COMPANY**

**Breeders and Growers of Fine Tomato Seed Since 1881**  
**Vincentown, New Jersey**